## NEW RACE ARGYROCUPHA MALAGRIDA, W. CAPE PROVINCE 297

sth. Afr. 25 (2): 274); however, it appears to be closer in certain respects to *P. pyramus* Pennington (1953, *idem* 16 (2): 105), which inhabits the nearby Zwartberg Range and, on the upperside, tne male is rather surprisingly similar to specimens of *P. thysbe* from the Cape Agulhas-Arniston area of the South Western Cape — although readily separable from these by the reduced silvery-blue areas, generally broader distal margin of the forewing with less orange in the cilia and on the wing-margin itself, as well as certain other features. The female is also easily distinguishable on the upperside from that of specimens from the above area, by means of the characters listed in the main description; while the undersides of both sexes exhibit clear distinguishing characters. The orange-red ground-colour of the upperside is a little richer than in *P. endymion* but not quite as rich as in *P. pyramus*.

The discovery of another new species of the P. thysbe group as distinct as the present one and within a tract of country that had already received a fair amount of attention from the butterfly point of view, is certainly of much interest. The writers have much pleasure in naming this beautiful insect after Dr. Jonathan B. Ball, in recognition of his unbounded enthusiasm in searching for butterflies in many likely, promising areas in the Cape and elsewhere in Southern Africa. When referring to one of his trips on which P. balli was caught, Dr. Ball has stated in a letter of 19th February, 1979: - "I went again to the range on 3.2.79, walked continually from 9 a.m. to 3 p.m., went up every peak and also explored the highest slopes. I found only four specimens and like the other specimens found earlier they flew either on the summits or within 200m. [656 ft.] of the highest points. The males enjoy resting on the dry flower-heads of a grass. Two female specimens were both found flying around a very prickly Composite plant. I did not see them laying eggs, but this could be the food-plant."

A new race of Argyrocupha malagrida (Wallengren) (Lepidoptera: Lycaenidae) from the Western Cape Province

By C. G. C. DICKSON\* and W. H. HENNING\*\*

No. 52

The discovery of a new race of the above butterfly, at a low altitude near the sea, was most unexpected; this being PLATE XIX

*Poecilmitis balli* spec. nov.: fig. 1.  $\diamond$  holotype (upperside); fig. 2.  $\diamond$  holotype (underside); fig. 3.  $\Diamond$  allotype (upperside); fig. 4  $\Diamond$  allotype (underside).

Argyrocupha malagrida maryae subsp. nov.: fig. 5.  $\diamond$  holotype (upperside); fig. 6.  $\diamond$  holotype (underside); fig. 7.  $\heartsuit$  allotype (upperside); fig. 8.  $\heartsuit$  allotype (underside).

Figures natural size. Note: The blue in *P. balli* is more violaceous than indicated in figure. (Colour reproduction by Unifoto (Pty.), Ltd., Cape Town).

\* "Blencathra", Cambridge Avenue, St. Michael's Estate, Cape Town. \*\*1, Lawrence Street, Florida Park, Florida, Transvaal, South Africa.

especially so when it is considered that the locality, Struys Bay, near Cape Agulhas, lies approximately 92 miles S.E. of the nearest known habitat (the Paarl Mountain) for any other race of Argyrocupha malagrida (Wallengren). Much credit is therefore due to those who found the present race, in February, 1977, and thus threw such interesting fresh light on the distribution of the species as a whole. A description of this race follows hereunder.

Argyrocupha malagrida maryae subsp. nov.

Average size of both sexes seems greater than in closest allied race at least from material available for comparison (comparisons being made with Argyrocupha malagrida cedrusmontana Dickson & Stephen (Entomologist's Record J. Var. 87 (5): 129-132 (1975), to which race the greatest affinity seems to be apparent). Forewing of the male more evenly rounded along distal margin, without any sign of "elbowing" some distance below apex.

Male (Upperside).

Forewing. Orange-red colouring more extensive outwardly, thus leaving a narrower distal black border than in the other race; the orange-red forming a subapical ray, divided into two small portions by the dark scaling of vein 6. A distinct small orange-yellow marking at end of cell, which intrudes into lower portion of the broad dark costal border. Most, or much, of costa bordered or edged with light, rather fawn colouring.

Hindwing. Orange-red also more extensive in this wing, than in other race, leaving a narrower black distal border and with some extension upwards into the apical portion of the wing, as far as vein 6. Furthermore, the orange-red colouring forms a streak within the dark portion of the wing adjoining the slight inner-marginal concavity which, in itself, is lighter than in the other race. There is, in all specimens that have been observed, some diffuse dark scaling across the more inner portion of the orange-red area.

Cilia, especially in the forewing, with more prominent white spaces and with the white, in most of the spaces, clearly extending on to the wing-surface itself, on this wing.

Underside.

Very similar to that of m. cedrusmontana, allowing for the usual variation in individual specimens of this group.

Forewing. Spotting in orange area more conspicuous, as a whole, than in other race. White spaces in cilia rather more prominent and tending to extend further inwards.

Hindwing. Some of the silvery markings tend to be broader or generally larger than in the other race - including the basal mark immediately below the costa and that immediately beyond the cell. The deeper marking in this wing is perhaps more consistently dark than in cedrusmontana.

In this insect as in other races of Argyrocupha malagrida the background to the apical area of the forewing underside and much of the hindwing underside, including the veining, is of a more reddish or even vinous tone in some specimens, than in others, in which a fawn-brown tone may predominate.

Length of forewing: 15.25-15.75 mm. ((the latter measurement, in holotype).

## Female (Upperside).

Orange or orange-red ground-colour more extensive, in all wings, than in male and, judging by available material, less reddish in tone. The cilia, though interspersed with quite pronounced white spaces, have these spaces less pronounced than in the male. The well rounded distal margins of the forewings of the female are no more rounded than in the male, in this race.

## Underside.

From the specimens examined, the silvery marking of the forewing is reduced, in general, in comparison with that of the male, as is at least part of that of the hindwing, with the lighter background to the wing more extensive and of an ochreous (somewhat orange-ochreous) tone. The dark marking contrasts more clearly and gives a different over-all impression than in the male.

Length of forewing: 15.75-18.0 mm. (the latter measurement, in the allotype).

Body and ancillary parts very much as in cedrusmontana.

♂ Holotype, WESTERN CAPE PROVINCE: Struys Bay, nr. Cape Agulhas, 22.ii.1977 (I. Bampton); British Museum Reg. No. Rh. 18693.

Allotype, W. CAPE PROVINCE: data as for holotype (Mrs. Mary Smith); British Museum Reg. Rh. 18694.

Paratypes in Coll. C.G.C.D.; data as for holotype, one ♂, one ♀ (I. Bampton); one ♂ (Mrs. M. Smith). Partypes in Coll. W. H. Henning: data as holotype,

Partypes in Coll. W. H. Henning: data as holotype, twelve  $\sigma \sigma$ , two  $\varphi \varphi$  (I. B.): five  $\sigma \sigma$  five  $\varphi \varphi$  (Mrs. M. S). (Specimens from the finally-listed series will be presented to the Transvaal Museum, Pretoria.)

In preparations of the male genitalia of nominate malagrida and maryae a few small differences were apparent. In the latter, for instance, the tegumen was dorsally almost straight when viewed from the side, but, in the nominate race, with a small rounded protuberance before the juncture with the uncus; the saccus had a distinct downward curvature at its extremity, instead of remaining horizontal; and the valva was slightly but distinctly concave ventrally, in the lateral view, instead of being slightly convex, as in the nominate race. As only a single preparation was made in each case it is not known if these small differences would occur consistently in the taxa concerned. (The male genitalia of two members of the group were figured by Dickson and Stephen (1975) (op. cit)).

In a statement pertaining to the habits, etc., of this butterfly Mr. Bampton has remarked, *inter alia*: — "The insect was first found on a patch of burnt vegetation situated

I/XI-XII/80

at the base of a steep rocky hillside. There were several rockoutcrops and one or two rocky ridges and it was in these areas that all my specimens were captured. Males were fairly common but they had to be "put up." Females were, however, uncommon and were only seen when flying among the outcrops or along the sides of the ridges."

After her close, initial association with this insect, it is being named appropriately, and with pleasure, after Mrs. Mary Smith.

## Practical Hints

During the last half of March, larvae of the Beautiful Gothic (Leucochlaena oditis Hb.) can be found after dark in their cliff haunts on the south west coast. They are grass feeders, preferring Sheep's Fescue, particularly where this grows around the bases of large boulders giving shelter. However, larvae also occur in the wild on Couch Grass growing on grassy banks. The larva is a consistent rust-brown colour with blackish marks on each side of the body. Head pale brown marked with two black streaks. Some larvae of the Square Spot Rustic (Xestia xanthographa D. & S.) which can be quite large at this early time of year, may be distinguished easily from those of L. oditis by the presence of dorsal lines and ochreous or brown spiracular stripe, all features absent from odites. From about the 16th to the 24th of March is best for the full grown larva of oditis. Later on only odd larvae may be found (Platts).

Many Micros pupate in or under bark and should be provided with something similar when kept in captivity. The old books recommend 'cork' or 'rotten willow'. I never seem to come across this kind of thing. Balsa-wood is a perfectly satisfactory alternative and can be bought in packs of assorted shapes and sizes from almost any toy shop. Cut it into suitably-sized pieces and bore holes in *one side only*; I use a screwdriver with a  $\frac{3}{8}$ " blade (W. A. C. Carter).

Setting-boards for Micros are costly and not always suitable; in these days of D.I.Y. it is perfectly possible to make one's own. Strips of balsa-wood 1" wide by  $\frac{1}{2}$ " thick are readily obtainable at toy-shops. Length is a matter of preference but 12" or 13" is recommended. Glue the strips to  $\frac{3}{4}$ " ply-wood and plane off the edges of the latter flush with the sides of the balsa. The groove should be  $\frac{1}{8}$  wide and about  $\frac{3}{8}$ deep. The best way to cut this is with a circular saw but it could, no doubt, be cut with an Exacta knife. The groove can be lined with polyporos but this is not essential. The paper must be smooth, thin, white and opaque — it is best obtained from a firm of printers which generally has a wide selection to choose from. Use a water-soluble paste to stick the paper to the board and, to avoid wrinkles and creases, ensure that the paper is well soaked before it is applied — as is done when paper-hanging. (W. A. C. Carter.)